

Public Notice

Notice is hereby given that the County of Webb is now accepting sealed proposals for the Webb County Building Roof replacement with 60 mil white TPO membrane 20 year guarantee, located at 4101 Juarez St. Laredo, Texas.

RFP 2014-06 "Webb County Building Roof Replacement"

Sealed proposals must be submitted with (1) one original and (8) eight copies in one sealed envelope to the Office of Webb County Clerk.

Sealed envelopes must be marked (Sealed – Proposals) with proposal number on front lower left hand corner of envelope.

Request for Proposals will be either hand delivered or mailed to the following location:

Webb County Clerk
Webb County Justice Center
1110 Victoria St., Suite 201
Laredo, Texas 78042-0029

Pre-Proposal Meeting will be held on **Thursday July 10, 2014 at 9:00 a.m.**, at the Webb County, Purchasing Department Conference room, 1110 Washington Suite 101, Laredo, Texas 78042

Proposals must be delivered no later than **2:00p.m. Wednesday July 16, 2014**, at which time all proposals received will be opened and read to the public. Late proposals will have no consideration and will be returned un-open to respective bidder.

Plans and specifications may also be viewed at web-site www.webbcountytexas.gov under Purchasing Agent, Public notices. The County of Webb reserves the right to reject any or all proposals.

If any additional information is required please contact, Leticia Gutierrez, Webb County Purchasing Department, 1110 Washington, Suite 101, (956) 523-4125, Laredo, Texas 78042. If you have any questions please sent to lgutierrez@webbcountytexas.gov deadline for questions is July 11, 2014.

Dr. Cecilia May Moreno
Purchasing Agent

Publish: Thursday July 3, 2014
Thursday July 10, 2014

THIS FORM MUST BE INCLUDED WITH RFP-PACKAGE; PLEASE CHECK OFF EACH ITEM AND SIGN

“Sealed Proposal Checklist”

RFP-2014-006“Webb County Building Roof Replacement”

- ☐ Public Notice
- ☐ Scope of Work Proposal
- ☐ Terms and Conditions (Please read)
- ☐ Conflict of Interest Forms (required)
- ☐ Certification Regarding Debarment (Form H2048) (required)
- ☐ Certification Regarding Federal Lobbying (Form 2049) (required)
- ☐ Proof of No Delinquent Tax Owed to Webb County (required)
- ☐ Proposal Information form (required)
- ☐ References (required)

Signature

Webb County
RFP 2014-06 "Webb County Roof Replacement"

Section I – Introduction

I.1 Scope

- I.1.1 Webb County is seeking proposals for the replacement of the roof for the Building located on 4101 Juarez Street. Roof replacement specifications are available.
- I.1.2 Please refer to Part 1- General 01600 – Product Requirements of the prepared Roof Replacement Specification package

I.2 Contract terms

- I.2.1 Webb County expects to contract with a selected contractor for the replacement of the roof to the Webb County Building shortly after the award of the contract by the court.

Section II – Statement of Work

II.1 Service requirements

- II.1.1 Service requirements are fully detailed in the Roof Replacement Specification package compiled for the proposers.

Section III – Proposal Information

III.1 Schedule of events

- III.1.1 Responses to RFP 2014-06 are due by 2:00 PM on July 16, 2104 at 1110 Victoria St. Suite 201
- III.1.2 A pre- proposal conference will be held on July 10, 2014 at 9:00 A.M., 1110 Washington; Suite 101; Purchasing Department.

III.2 Pre proposal conference information

- III.2.1 A pre-proposal conference will be held on July 10, 2014 at 9:00 A.M., 1110 Washington; Suite 101; Purchasing Department Conference Room.
- III.2.2 Vendors are encouraged to attend; however, participation is not mandatory.

III.3 Proposal submission requirements

- III.3.1 Contractors must submit 8 copies of the package as required

III.3.2 Contractors are to review the check list provide. Check list identifies all documents that must be reviewed and/or submitted.

111.4 Where vendor should direct inquires

III.4.1 Information about the technical aspects of the work to be done should be directed to Tony Alderete at aalderete@webbcountytx.gov Engineering Department. They will take the written emails and prepare written responses that will be posted in the web site for the benefit of all contractors.

III.4.2 Information about the submittal of a proposal or about proposal requirements may directed to Leticia Gutierrez by calling 956-523-4125.

111.5 Proposal evaluation criteria

III.5.1 Price – 75 points

III.5.2 Offeror's experience and reputation-10 pts

III.5.3 Financial capability appropriate for scope of work- 10 pts

III.5.4 Other relevant factors - 5 points

Section IV- Contract Terms and Condition

SECTION 01600 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.

1.3 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.4 SUBMITTALS

- A. Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
 - 1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.

2. **Completed List:** Within 7 days after date of Notice of Award, submit 1 copy of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
3. **Owner's Action:** Owner will respond in writing to Contractor within 10 working days of receipt of completed product list. Owner's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Owner's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.

Owner's Action: If necessary, Owner will request additional information or documentation for evaluation within 10 working days of receipt of a request for substitution. Owner will notify Contractor of acceptance or rejection of proposed substitution within 10 working days of receipt of request, or 10 working days of receipt of additional information or documentation, whichever is later.

1.5 QUALITY ASSURANCE

- A. **Compatibility of Options:** If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.

- B. **Delivery and Handling:**

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

- C. **Storage:**

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
4. Store cementitious products and materials on elevated platforms.
5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.

6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
- C. Submittal Time: Comply with requirements in Division 1 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected," Owner will make selection.
 5. Where products are accompanied by the term "match sample," sample to be matched is Owner's.
 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.

B. Product Selection Procedures:

1. **Product:** Where Specifications name a single product and manufacturer, provide the named product that complies with requirements or equal.
2. **Manufacturer/Source:** Where Specifications name a manufacturer or source, provide a product by the named manufacturers or sources that complies with requirements or equal.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01600

SECTION 01732 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Demolition and removal of existing roofing and all related components.

1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.

1.4 SUBMITTALS

- A. Pre-demolition Photographs: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by selective demolition operations.
- B. Submit name of demolition sub-contractor(s), if any, along with any other information required by the Owner concerning the subcontractor.
 - 1. Submit per AIA Document A201, General Conditions.

1.5 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI A10.6 and NFPA 241.
- C. Pre-demolition Conference: Conduct conference at Project site.

1.6 PROJECT CONDITIONS

- A. Move or otherwise relocate any electrical or mechanical items that might have an impact on the successful demolition.
- B. Owner will occupy portions of building immediately below the selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- C. Notify Owner of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is unknown whether hazardous materials will be encountered in the Work.
 - 1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Owner. Owner will remove hazardous materials under a separate contract.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities affected by the Work have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Owner.
- E. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
 - 1. Comply with requirements for existing services/systems interruptions specified in Division 1 Section "Summary."
- B. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
 - 2. If services/systems are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - 3. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.

3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Comply with requirements for access and protection specified in Division 1.

3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
 - 2. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
 - 3. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
 - 4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - 5. Dispose of demolished items and materials promptly.

- B. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition including but not limited to:
 - 1. Rooftop equipment
 - 2. Rooftop piping
 - 3. Utility equipment
 - 4. Roof Hatch

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Existing Roofing: Remove existing roofing down to structural concrete deck or lightweight concrete deck. Existing roofing must be removed from all equipment, piping, walls and other surfaces.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.7 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 01732

SECTION 06105 - MISCELLANEOUS CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Wood blocking, cants, and nailers.

1.3 DEFINITIONS

- A. Lumber grading agencies, and the abbreviations used to reference them, include the following:
 - 1. SPIB - Southern Pine Inspection Bureau.
 - 2. WWPA - Western Wood Products Association.

1.4 SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
 - 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used, net amount of preservative retained, and chemical treatment manufacturer's written instructions for handling, storing, installing, and finishing treated material.
 - 2. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber, plywood, and other panels; place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. For exposed lumber indicated to receive a stained or natural finish, mark grade stamp on end or back of each piece.
 - 3. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
 - 4. Provide dressed lumber, S4S, unless otherwise indicated.
 - 5. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal (38-mm actual) thickness or less, unless otherwise indicated.
 - 6. Thickness: As needed to comply with requirements specified but not less than thickness indicated.
 - 7. Factory mark panels according to indicated standard.

2.2 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. Preservative Treatment by Pressure Process: AWPAC2 (lumber) and AWPAC9 (plywood), except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPAC31 with inorganic boron (SBX).
 - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and one of the following:
 - a. Ammoniacal copper zinc arsenate (ACZA).
- B. Kiln-dry material after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood. Do not use material that is warped or does not comply with requirements for untreated material.
- C. Mark each treated item with the treatment quality mark of an inspection agency approved by the American Lumber Standards Committee Board of Review.
 - 1. For exposed lumber indicated to receive a stained or natural finish, mark end or back of each piece.
- D. Application: Treat items indicated on Drawings, and the following:
 - 1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
 - 2. Wood sills, blocking, and similar concealed members in contact with masonry or concrete.
 - 3. Wood framing members less than 18 inches (460 mm) above grade.

2.3 MISCELLANEOUS LUMBER

- A. General: Provide lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Cants.
 - 3. Nailers.
- B. For items of dimension lumber size, provide Construction, Stud, or No. 2 grade lumber with 15 percent maximum moisture content and any of the following species:
 - 1. Mixed southern pine; SPIB.
- C. For concealed boards, provide lumber with 15 percent maximum moisture content and any of the following species and grades:
 - 1. Mixed southern pine, No. 2 grade; SPIB.

2.4 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
- B. Screws for Fastening to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened.
- C. Lag Bolts: ASME B18.2.1. (ASME B18.2.3.8M).

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Discard units of material with defects that impair quality of carpentry and that are too small to use with minimum number of joints or optimum joint arrangement.
- B. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- C. Apply field treatment complying with AWWA M4 to cut surfaces of preservative-treated lumber and plywood.
- D. Securely attach carpentry work as indicated and according to applicable codes and recognized standards.
- E. Countersink fastener heads on exposed carpentry work and fill holes with wood filler.

- F. Use fasteners of appropriate type and length. Predrill members when necessary to avoid splitting wood.

3.2 WOOD BLOCKING, AND NAILER INSTALLATION

- A. Install 1" x 6" vertical nailer at outside roof perimeter prior to installing new gutter system. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces, unless otherwise indicated.

END OF SECTION 06105

SECTION 07552 - SBS-MODIFIED BITUMINOUS MEMBRANE ROOFING

PART 1 - GENERAL

1 RELATED DOCUMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

2 SUMMARY

- A This Section includes the following:

- 1 Remove and properly dispose all existing membrane, insulation and flashings down to and exposing the structural concrete deck.
- 2 Install necessary wood nailers.
- 3 Using a two component, solvent free, elastomeric urethane low rise foam adhesive adhere one course 2" thick 4'x4' polyiso insulation board.
- 4 On roof Section C, install polyiso insulation tapered at 1/4" per foot in hot asphalt.
- 5 Using hot asphalt, install a 6 sided asphalt coated 1/2" wood fiber board.
- 6 Over wood fiber board, install one (1) ply of polyester/glass/polyester trillaminate reinforcement coated with waterproofing asphalt, fully adhered in hot asphalt.
 - a Adhere ply in 25 lbs per square hot asphalt.
- 7 Install a mineral granule surfaced, fire rated, SBS modified asphalt cap sheet in hot asphalt.
 - a Adhere cap sheet in 25 lbs per square hot asphalt.
- 8 Install base flashing utilizing base ply and granulated cap sheet set in hot asphalt.
- 9 Provide and install 24 gauge galvanized steel counterflashings and metal edge/gravel guard as required. Provide and install 24 gauge stainless steel pitch pans and bonnets as required.

- B Related Sections include the following:

- 1 Division 6 Section "Miscellaneous Carpentry" for wood nailers, cants, curbs, and blocking.
- 2 Division 7 Section "Sheet Metal Flashing and Trim" for metal roof penetration flashings, flashings, and counterflashings.
- 3 Division 7 Section "Membrane Reroof Preparation" for membrane preparation procedures.
- 4 Division 7 Section "Roof Accessories" for all required roof accessories.

3 DEFINITIONS

- A Roofing Terminology: Refer to ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.

4 PERFORMANCE REQUIREMENTS

- A General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.
- B Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.
- C Roofing System Design: Provide a roofing system that is identical to systems that have been successfully tested by a qualified testing and inspecting agency to resist uplift pressure calculated according to ASCE 7.
- D Flashings: Provide base flashings, perimeter flashings, detail flashings and component materials that comply with requirements and recommendations in Perimeter Flashings; for Above Deck Roof Components; NRCA Roofing and Waterproofing Manual (Fifth Edition) for Construction Details and SMACNA Architectural Sheet Metal Manual (Fifth Edition) for Construction Details, as applicable.
- E Provide a roofing membrane, base flashings, and component materials that comply with requirements for a roofing system for Class 1 or noncombustible construction, as applicable.
 - 1 Fire/Windstorm Classification: Class 1A-90.
 - 2 Hail Resistance: SH.

5 SUBMITTALS

- A Product Data: For each type of product indicated.
- B Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other Work.
 - 1 Base flashings, cants, and membrane terminations.
 - 2 Tapered insulation, including slopes.
 - 3 Crickets, saddles, and tapered edge strips, including slopes.
 - 4 Insulation fastening patterns.
- C Qualification Data: For Installer and manufacturer.
- D Research/Evaluation Reports: For components of roofing system.
- E Maintenance Data: For roofing system to include in maintenance manuals.
- F Warranties: Special warranties specified in this Section.
- G Technical Inspectors Approval: Evidence of roofing system manufacturer's compliance with technical inspector qualifications.

- H Inspection Report: Copy of roofing system manufacturer's inspection report of completed roofing installation.

6 QUALITY ASSURANCE

- A Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's warranty.
- B Technical Inspector Qualifications: Contractor will engage a qualified manufacturer's technical representative to perform roof tests and inspections and to prepare test reports. The inspector must be a full time employee of the material manufacturer. One inspection per week must be performed and a subsequent inspection report shall be submitted to the contractor and the owner.
- C Manufacturer Qualifications: A qualified manufacturer that has UL listing for roofing system identical to that used for this Project.
- D Testing Agency Qualifications: An independent testing agency with the experience and capability to conduct the testing indicated, as documented according to ASTM E 548.
- E Source Limitations: Obtain components for roofing system approved by roofing system manufacturer.
- F Fire-Test-Response Characteristics: Provide roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.
 - 1 Exterior Fire-Test Exposure: Class A; ASTM E 108, for application and roof slopes indicated.
 - 2 Fire-Resistance Ratings: ASTM E 119, for fire-resistance-rated roof assemblies of which roofing system is a part.
- G Preliminary Roofing Conference: Before starting roof deck construction, conduct conference at Project site. Comply with requirements for pre-installation conferences in Division 1 Section "Project Management and Coordination." Review methods and procedures related to roof deck construction and roofing system including, but not limited to, the following:
 - 1 Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.
 - 2 Review methods and procedures related to roofing installation, including manufacturer's written instructions.
 - 3 Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

- 4 Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
- 5 Review structural loading limitations of roof deck during and after roofing.
- 6 Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
- 7 Review governing regulations and requirements for insurance and certificates if applicable.
- 8 Review temporary protection requirements for roofing system during and after installation.
- 9 Review roof observation and repair procedures after roofing installation.

H Pre-installation Conference: Conduct conference at Project site. Comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to roofing system including, but not limited to, the following:

- 1 Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, deck Installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.
- 2 Review methods and procedures related to roofing installation, including manufacturer's written instructions.
- 3 Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
- 4 Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
- 5 Review structural loading limitations of roof deck during and after roofing.
- 6 Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
- 7 Review governing regulations and requirements for insurance and certificates if applicable.
- 8 Review temporary protection requirements for roofing system during and after installation.
- 9 Review roof observation and repair procedures after roofing installation.

7 DELIVERY, STORAGE, AND HANDLING

- A Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storage.
- B Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
 - 1 Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

- C Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

8 PROJECT CONDITIONS

- A Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

9 WARRANTY

- A. Warranty. General: Warranties specified shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
- B. The Integrated System Warranty shall include the performance of all traditional roof systems as specified in this Section.
- C. Upon project completion, Manufacturer acceptance, and once complete payment has been received; the contractor shall deliver to the Owner a (20) year Quality Assurance Warranty and Owner's Manual.
- D. The Manufacturer's Warranty must include labor & material coverage against leakage on all components; including those manufactured by others. Included are the following:
 1. Base sheet and fasteners.
 2. All roof membrane components and adhesives.
 3. All wood blocking and fastening components.
 4. All perimeter flashing metal components.
 5. All cant strips.
 6. All existing or new counter flashing.
 7. All surface mastics, coatings, stripping ply, etc.
 8. Any leaks or other problems caused by substrate movement, excluding the deck.
 9. Cover against damages from wind speeds up to hurricane force winds as outlined within the Beaufort Scale.

Special Project Warranty:

1. Submit Installer's Warranty signed by the Installer, covering the work of this Section, including membrane roofing, base flashing, roofing insulation, fasteners, sheet metal components, and vapor retarders, if any, for the following warranty period. Roofing contractor shall provide a letter to the architect stating that the roofing contractor will agree to participate in allowances and adjustments for 2 years of the warranty period. It must be determined by the architect and the roof system manufacturer that the defects in

- the roofing assembly are a result of application and workmanship errors. The roof contractor at their expense will correct all defects noted during this time period.
2. Roof Installers Warranty Period: 2 years from the date of substantial completion.

PART 2 - PRODUCTS

B

2.3 ROOFING MEMBRANE PLIES

- A Base Ply: Burmastic Modified Composite Ply: Trilaminate reinforced ply sheet, complying with ASTM D 4601-91; ASTM 228-90A and ASTM 146-90 with the following properties:

1. Thickness: 1.2 mm
2. Tensile strength: 161 lbf/in(38.5 kN/m) MD. 137 lbf/in (41.1 kN/m) XMD.
3. Elongation: 5.54% MD/XMD.
4. Tear Strength: 265 lbf (1534 N) MD. 212 lbf (1467 N) XMD minimum.
5. Mass of desaturated polyester/glass/polyester mat, min.: 3.5 lb/100ft (172 g/m²)
6. Asphalt: 10.0 lb/100 ft (485g/m²) minimum.

- B Cap Sheet: Powerply Standard FR

1. Thickness: 3 mm
2. Tensile Strength: 120 lbf/in (21kN/m) MD. 115 lbf/in (20kN/m) XMD
3. Elongation: 2.6% MD/2.5% XMD
4. Tear Strength: 104 lbf MD. 108 lbf XMD
5. Low Temperature Flex: -15 °F
6. Puncture Resistance: 70 lbf

2.4 FLASHING MATERIALS

- A Back Up Ply: Burmastic Modified Composite Ply: Trilaminate reinforced ply sheet, complying with ASTM D 4601-91; ASTM 228-90A and ASTM 146-90 with the following properties:

1. Thickness: 1.2 mm
2. Tensile strength: 161 lbf/in(38.5 kN/m) MD. 137 lbf/in (41.1 kN/m) XMD.
3. Elongation: 5.54% MD/XMD.
4. Tear Strength: 265 lbf (1534 N) MD. 212 lbf (1467 N) XMD minimum.
5. Mass of desaturated polyester/glass/polyester mat, min.: 3.5 lb/100ft (172 g/m²)
6. Asphalt: 10.0 lb/100 ft (485g/m²) minimum.

- B Base Flashing: Powerply Standard FR

1. Thickness: 3 mm
2. Tensile Strength: 120 lbf/in (21kN/m) MD. 115 lbf/in (20kN/m) XMD
3. Elongation: 2.6% MD/2.5% XMD
4. Tear Strength: 104 lbf MD. 108 lbf XMD

5. Low Temperature Flex: -15 °F
6. Puncture Resistance: 70 lbf

C Glass-Fiber Fabric: Burmesh: Woven glass cloth, treated with asphalt, complying with ASTM D 1668, Type I.

2.5 ASPHALT MATERIALS

- A Asphalt Primer: Tremprime WB: A water based polymer modified asphalt primer
- B Hot Roofing Asphalt: ASTM D 312, Type IV

2.6 AUXILIARY ROOFING MEMBRANE MATERIALS

- A General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with built-up roofing.
- B Asphalt Roofing Cement: ELS Mastic: ASTM D 4586, asbestos free, of consistency required by roofing system manufacturer for application.
- C Elastomeric Mastic Sealant: Poyroof LV: a single component roof elastomer.
 1. Elongation: 1000% at 35 C
- D Metal Flashing Sheet: Metal flashing sheet is specified in Division 7 Section "Sheet Metal Flashing and Trim."
- E Urethane Sealant: Tremseal D: premium gun grade 1 component polyurethane sealant.
- F Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer.
- G Termination Bar: Extruded aluminum, pre-punched 8" o.c.

2.7 Metal Flashing:

- A Metal flashings, counter flashings, pitch pans, scuppers, and like applications shall be in accordance with:
 1. Architectural Sheet Metal Manual, as issued by Sheet Metal and Air Conditioning Contractors' National Association, Inc., (SMACNA).
 2. National Roofing Contractors Association Manual (NRCA).
 3. Sheet metal flat stock to be provided by Tremco.
- B Collector head, downspout and other visible sheet metal flashing:
 1. Galvanized: Flat Stock Twenty-four (24) gage minimum, galvanized steel; commercial quality, Fed. Spec. QQ-S-775, Type I, Class D or ASTM A 526 or lock forming quality ASTM A 527, G90 coating in accordance with ASTM A 525.
- C Counter flashing, Slip flashing, Pitch pans with hood, etcetera:
 1. Galvanized Steel: ASTM A 526-85, sheet steel with 1.25 oz./sq. (3.82 g/m²) galvanized coating.

- a. Gage: Twenty-four (24).
- b. Solder: ASTM B32-89, alloy grade 50A. Neutralize flux after soldering.

D Lead Flashings:

- 1. ASTM B 29-79(1984), 4 lb. (1.82 kg) sheet lead.
- 2. Use prefabricated plumbing vent flashings with factory welded and sealed joints at all plumbing vents.
 - a. Flange: 4" minimum.
- 1. Use a single piece of sheet lead flashing at roof drains.
 - a. Minimum 30" x 30"

2.8 ROOF INSULATION

- A General: Provide preformed roof insulation boards that comply with requirements and referenced standards, selected from manufacturer's standard sizes and of thickness indicated.
- B Provide preformed polyisocyanurate saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated.
- C Wood Fiber Board: Temple Fiber Base HD: ASTM C 208, Type II, Grade 1, cellulosic-fiber insulation board.
 - 1. Nominal 1/2" thickness
 - 2. Asphalt coated on six sides

2.9 INSULATION ACCESSORIES

- A General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatible with membrane roofing.
- B Low Rise Foam Adhesive: Low Rise Foam Insulation Adhesive is a two component (1:1 ratio), solvent free, elastomeric urethane adhesive.
- C Cants: Wood cants are specified in Division 6 Section "Misc Carpentry."
- D Wood Nailer Strips: Comply with requirements in Division 6 Section "Misc Carpentry."
- E Tapered Edge Strips: ASTM C 208, Type II, Grade 1, cellulosic-fiber insulation board.

2.10 MECHANICAL FASTENERS

- A Base sheet/rosin sheet to cement wood fiber deck:
 - 1. ES Twin Loc-Nail with 2.7" diameter disc.
 - 2. Length: Sufficient to penetrate deck 1".
- B Wood to wood:
 - 1. Galvanized, common, annular ring nail.
 - 2. Length: Sufficient to penetrate underlay blocking 1-1/4".
- C Sheet steel to wood blocking (if required):

1. FS FF-N-105B Type II, Style 20, roofing nails galvanized and stainless steel, flat head, diamond point, round, barbed shank.
 2. Length: Sufficient to penetrate wood blocking 1 ¼".
- D Termination bar to masonry or concrete:
1. Lead masonry anchors.
 2. Length: Sufficient to provide 1 ¼" embedment minimum.
- E Drawband:
1. Gold Seal stainless worm gear clamp by Murray Corporation, Cockeysville MD.
 2. Power-Seal stainless steel worm drive clamps by Breeze Clamp Co, Saltsburg PA.

PART 3 - EXECUTION

3.1 EXAMINATION

- A Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of roofing system:
- 1 Verify that roof openings and penetrations are in place and set and braced and that roof drains are securely clamped in place.
 - 2 Verify that wood cants, blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thickness of insulation.
 - 3 Verify that concrete curing compounds that will impair adhesion of roofing components to roof deck have been removed.
 - 4 Verify that concrete substrate is visibly dry and free of moisture. Test for capillary moisture by plastic sheet method according to ASTM D 4263.
 - 5 Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.
- B Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.
- C Prime surface of concrete deck with specified asphalt primer at a rate of 0.5-0.25 gal./100 sq. ft. and allow primer to dry. Surface must be re-primed if exposed for more than 24 hours.

3.3 INSULATION INSTALLATION

- A Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.

- B Comply with roofing system manufacturer's written instructions for installing roof insulation.
- C Wood Cants: Install and secure preformed 45-degree wood cants at junctures of built-up roofing membrane system with vertical surfaces or angle changes greater than 45 degrees.
- D Install insulation under area of roofing to conform to slopes indicated.
- E Install insulation with long joints of insulation in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch (6 mm) with insulation.
 - 1 Cut and fit insulation within 1/4 inch (6 mm) of nailers, projections, and penetrations.
- F Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.
- G Install tapered edge strips at perimeter edges of roof that do not terminate at vertical surfaces.
- H Adhered Insulation: Install each layer of insulation and adhere to substrate as follows:
 - 1 Set each layer of insulation in a low rise foam adhesive or hot asphalt.
 - 2 Adhere insulation according to requirements for specified Windstorm Resistance Classification.
 - 3 Adhere insulation to resist uplift pressure at corners, perimeter, and field of roof.
- I Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Stagger joints from joints in insulation below a minimum of 6 inches (150 mm) in each direction. Loosely butt cover boards together and fasten to roof deck. Tape joints if required by roofing system manufacturer.
 - 1 Adhere according to requirements for specified Windstorm Resistance Classification.
 - 2 Adhere to resist uplift pressure at corners, perimeter, and field of roof.
 - 3 Adhere layer of cover board in a cold fluid-applied adhesive.

3.4 ROOFING MEMBRANE INSTALLATION, GENERAL

- A Install built-up roofing membrane system according to roofing system manufacturer's written instructions and applicable recommendations of ARMA/NRCA's "Quality Control Guidelines for the Application of Built-up Roofing."
- B Start installation of built-up roofing membrane in presence of roofing system manufacturer's technical personnel.
- C Cooperate with testing and inspecting agencies engaged or required to perform services for installing built-up roofing system.
- D Coordinate installing roofing system components so insulation and roofing membrane sheets are not exposed to precipitation or left exposed at the end of the workday or when rain is forecast.

- 1 Provide tie-offs at end of each day's work to cover exposed roofing membrane sheets and insulation with a course of coated felt set in roofing cement or hot roofing asphalt with joints and edges sealed.
- 2 Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system.
- 3 Remove and discard temporary seals before beginning work on adjoining roofing.

3.5 ROOFING MEMBRANE INSTALLATION

- A. Over wood fiber cover board, install specified base ply using ASTM D 312 Type IV asphalt as required to meet FM 1-90 wind uplift resistance.
- B. Install cap sheet starting at low point of roofing system. Align cap sheets without stretching. Shingle side laps of ply sheets uniformly to achieve required number of plies throughout thickness of roofing membrane. Shingle in direction to shed water. Extend ply sheets over and terminate beyond eaves.
 - 1 Application: Adhere cap sheet in ASPM D 312 Type IV asphalt, applied within temperature range and at rate required by roofing system manufacturer. All fish mouths and mole runs will be repaired.
- C. Surfacing Application:
 - 1 Apply mineral granules similar in color to those imbedded in cap sheet to all areas of exposed asphalt.

3.6 FLASHING AND STRIPPING INSTALLATION

- A. Install modified bitumen cap sheet over cant strips and other sloping and vertical surfaces, at roof edges, and at penetrations through roof, and secure to substrates according to roofing system manufacturer's written instructions and as follows. Install utilizing ASTM D 312 Type IV hot asphalt.
- B. Prime substrates with asphalt primer if required by roofing system manufacturer.
- C. Extend base flashing up the wall a minimum of 8 inches (200 mm) above roof membrane and 6 inches (150 mm) onto field of roof membrane.
- D. Mechanically fasten top of base flashing securely at terminations and perimeter of roofing.
 1. Seal top termination of base flashing.
- E. Roof Drains: Refer to Detail Drawing C-0314.
- F. Plumbing Vent: Refer to Detail Drawing C-0315.
- G. Pitch Pocket: Refer to Detail Drawing C-0315.

3.7 FIELD QUALITY CONTROL

- A Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform roof tests and inspections and to prepare test reports.
- B Test Cuts: Before flood coating and surfacing built-up roofing membrane, test specimens will be removed to evaluate problems observed during quality-assurance inspections of roofing membrane as follows:
 - 1 Approximate quantities of components within roofing membrane will be determined according to ASTM D 3617.
 - 2 Test specimens will be examined for interply voids according to ASTM D 3617 and to comply with criteria established in Appendix 3 of ARMA/NRCA's "Quality Control Guidelines for the Application of Built-up Roofing."
- C Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion and submit report to Architect.
 - 1 Notify Architect or Owner 48 hours in advance of date and time of inspection.
- D Repair or remove and replace components of roofing system where test results or inspections indicate that they do not comply with specified requirements.
- E Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.8 PROTECTING AND CLEANING

- A Protect roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.
- B Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

3.9 DOOR SIZING AND FLASHING

- A The double door leading onto Roof Section C shall be trimmed along the bottom to a height that is consistent with the top of the counter flashing.
- B Wood blocking shall be installed to provide a new threshold and new metal flashing shall be installed to waterproof the assembly.

END OF SECTION 07511

SECTION 07591 - MEMBRANE REROOFING PREPARATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Roof tear-off.
 - 2. Removal of base flashings.
- B. Unit Prices: Refer to Division 1 Section "Unit Prices" for description of Work in this Section affected by unit prices.

1.3 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site and disposed of legally.

1.4 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.
- B. Existing Membrane Roofing System: Built-up asphalt and Built-up coal-tar roofing membrane, surfacing, and components and accessories between deck and roofing membrane.
- C. Roof Tear-Off: Removal of existing membrane roofing system from deck.
- D. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and reinstalled.
- E. Existing to Remain: Existing items of construction that are not indicated to be removed.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Installer of new membrane roofing system approved by warrantor of existing roofing system to work on existing roofing.

- B. **Regulatory Requirements:** Comply with governing EPA notification regulations before beginning membrane roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. **Reroofing Conference:** Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to roofing system including, but not limited to, the following:
 - 1. Meet with Owner, Owner's insurer if applicable; testing and inspecting agency representative; roofing system manufacturer's representative; roofing Installer including project manager, superintendent, and foreman; and installers whose work interfaces with or affects reroofing including installers of roof accessories and roof-mounted equipment.
 - 2. Review methods and procedures related to reroofing preparation, including membrane roofing system manufacturer's written instructions.
 - 3. Review temporary protection requirements for existing roofing system that is to remain, during and after installation.
 - 4. Review roof drainage during each stage of reroofing and review roof drain plugging and plug removal procedures.
 - 5. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 6. Review existing deck removal procedures and Owner notifications.
 - 7. Review procedures to determine condition and acceptance of existing deck for reuse.
 - 8. Review structural loading limitations of deck during reroofing.
 - 9. Review base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect reroofing.
 - 10. Review HVAC shutdown and sealing of air intakes.
 - 11. Review shutdown of fire-suppression, -protection, and -alarm and -detection systems.
 - 12. Review governing regulations and requirements for insurance and certificates if applicable.
 - 13. Review existing conditions that may require notification of Owner before proceeding.

1.6 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately below reroofing area. Conduct reroofing so Owner's operations will not be disrupted. Provide Owner with not less than 48 hours notice of activities that may affect Owner's operations.
 - 1. Coordinate work activities daily with Owner so Owner can place protective dust or water leakage covers over sensitive equipment or furnishings, shut down HVAC and fire-alarm or -detection equipment if needed, and evacuate occupants from below the work area if desired.
 - 2. Before working over structurally impaired areas of deck, notify Owner to evacuate occupants from below the affected area. Verify that occupants below the work area have been evacuated prior to proceeding with work over the impaired deck area.
- B. Protect building to be reroofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations.

- C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not block required exits or path from required exit to public right-of-way. Coordinate with requirements of authorities having jurisdiction.
- D. Owner assumes no responsibility for condition of areas to be reroofed.
- E. Construction Drawings for existing roofing system are available for Contractor's reference. Contractor is responsible for conclusions derived from existing documents.
- F. Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering into existing roofing system or building.
- G. Hazardous Materials: It is not expected that hazardous materials such as asbestos-containing materials will be encountered in the Work.

PART 2 - PRODUCTS

- 2.1 Not Used

PART 3 - EXECUTION

3.1 PREPARATION

- A. Coordinate with Owner to shut down air intake equipment in the vicinity of the Work. Cover air intake louvers before proceeding with reroofing work that could affect indoor air quality or activate smoke detectors in the ductwork.
- B. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
- C. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
 - 1. If roof drains will be temporarily blocked or unserviceable due to roofing system removal or partial installation of new membrane roofing system, provide alternative drainage method to remove water and eliminate ponding. Do not permit water to enter into or under existing membrane roofing system components that are to remain.
- D. Verify that rooftop utilities and service piping have been shut off before commencing Work.

3.2 ROOF TEAR-OFF

- A. General: Notify Owner each day of extent of roof tear-off proposed.

- B. Roof Tear-Off: Remove existing roofing membrane and other membrane roofing system components down to the deck.

3.3 DECK PREPARATION

- A. Inspect deck after tear-off of membrane roofing system.
- B. If deck surface is not suitable for receiving new roofing, or if structural integrity of deck is suspect, immediately notify Owner. Do not proceed with installation until directed by Owner.

3.4 INFILL MATERIALS INSTALLATION

- A. Immediately after removal of selected portions of existing membrane roofing system, and inspection and repair, if needed, of deck, fill in the tear-off areas to match existing deck construction.
 - 1. Installation of infill materials is specified in Division 7 Section.
 - 2. Install new roofing membrane patch over roof infill area. If new roofing membrane is installed the same day tear-off is made, roofing membrane patch is not required.

3.5 EXISTING BASE FLASHINGS

- A. Remove existing base flashings around parapets, curbs, walls, and penetrations.
 - 1. Clean substrates of contaminants such as sheet materials, dirt, and debris.

3.6 DISPOSAL

- A. Collect and place demolished materials in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
 - 1. Storage or sale of demolished items or materials on-site will not be permitted.
- B. Transport demolished materials off Owner's property and legally dispose of them.

END OF SECTION 07591

SECTION 07620 - SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following sheet metal flashing and trim:
 - 1. Formed roof drainage system.
 - 2. Formed counterflashing.
 - 3. Formed equipment support flashing.
- B. Related Sections include the following:
 - 1. Division 6 Section "Miscellaneous Carpentry" for wood nailers, curbs, and blocking.
 - 2. Division 7 Section "Cold Process Built-Up Roofing" for installing sheet metal flashing and trim integral with roofing membrane.
 - 3. Division 7 Section "Roof Accessories" for set-on-type curbs, equipment supports, roof hatches, vents, and other manufactured roof accessory units.

1.3 PERFORMANCE REQUIREMENTS

- A. General: Install sheet metal flashing and trim to withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failing, rattling, leaking, and fastener disengagement.
- B. Fabricate and install roof edge flashing capable of resisting the following forces according to recommendations in FMG Loss Prevention Data Sheet 1-49:
 - 1. Wind Zone 3: For velocity pressures of 46 to 104 lbf/sq. ft. (2.20 to 4.98 kPa): 208-lbf/sq. ft. (9.96-kPa) perimeter uplift force, 312-lbf/sq. ft. (14.94-kPa) corner uplift force, and 104-lbf/sq. ft. (4.98-kPa) outward force.
- C. Thermal Movements: Provide sheet metal flashing and trim that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, hole elongation, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Provide clips that resist rotation and avoid shear stress as a result of sheet metal and trim thermal movements. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- D. Water Infiltration: Provide sheet metal flashing and trim that do not allow water infiltration to building interior.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

1.5 QUALITY ASSURANCE

- A. Sheet Metal Flashing and Trim Standard: Comply with SMACNA's "Architectural Sheet Metal Manual." Conform to dimensions and profiles shown unless more stringent requirements are indicated.
- B. Preinstallation Conference: Conduct conference at Project site.
1. Meet with Owner, Owner's insurer if applicable, Installer, and installers whose work interfaces with or affects sheet metal flashing and trim including installers of roofing materials, roof accessories, unit skylights, and roof-mounted equipment.
 2. Review methods and procedures related to sheet metal flashing and trim.
 3. Examine substrate conditions for compliance with requirements, including flatness and attachment to structural members.
 4. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver sheet metal flashing materials and fabrications undamaged. Protect sheet metal flashing and trim materials and fabrications during transportation and handling.
- B. Unload, store, and install sheet metal flashing materials and fabrications in a manner to prevent bending, warping, twisting, and surface damage.
- C. Stack materials on platforms or pallets, covered with suitable weathertight and ventilated covering. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage.

1.7 COORDINATION

- A. Coordinate installation of sheet metal flashing and trim with interfacing and adjoining construction to provide a leak-proof, secure, and non-corrosive installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products specified.
 2. Products: Subject to compliance with requirements, provide one of the products specified.
 3. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.
 4. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 SHEET METALS

- A. Prepainted, Metallic-Coated Steel Sheet: Steel sheet metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
1. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating designation; structural quality.
 2. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, Class AZ50 coating designation, Grade 40 (Class AZM150 coating designation, Grade 275); structural quality.
 3. Exposed Finishes: Apply the following coil coating:
 - a. Factory Prime Coating: Where painting after installation is indicated, provide pretreatment and white or light-colored, factory-applied, baked-on epoxy primer coat; with a minimum dry film thickness of 0.2 mil (0.005 mm).
 - b. Siliconized-Polyester Coating: Epoxy primer and silicone-modified, polyester-enamel topcoat; with a dry film thickness of not less than 0.2 mil (0.005 mm) for primer and 0.8 mil (0.02 mm) for topcoat.
 - 1) Color: As selected by Owner from manufacturer's full range.
 - c. High-Performance Organic Finish: Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
- B. Lead Sheet: ASTM B 749, Type L51121, copper-bearing lead sheet.

2.3 UNDERLAYMENT MATERIALS

- A. Felts: Trilaminate-reinforced sheet provided by the specified manufacturer.

2.4 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation.
- B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads.
 - 1. Spikes and Ferrules: Same material as gutter; with spike with ferrule matching internal gutter width.
- C. Solder for Lead: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead.
- D. Burning Rod for Lead: Same composition as lead sheet.
- E. Sealing Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealing tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape.
- F. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
- G. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

2.5 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated. Shop fabricate items where practicable. Obtain field measurements for accurate fit before shop fabrication.
- B. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
- C. Fabricate sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.
 - 1. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.
 - 2. Seams for Other Than Aluminum: Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.
- D. Sealed Joints: Form nonexpansion but movable joints in metal to accommodate elastomeric sealant to comply with SMACNA recommendations.
- E. Expansion Provisions: Where lapped or bayonet-type expansion provisions in the Work cannot be used, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with elastomeric sealant concealed within joints.

- F. Conceal fasteners and expansion provisions where possible on exposed-to-view sheet metal flashing and trim, unless otherwise indicated.
- G. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
 - 1. Thickness: As recommended by SMACNA's "Architectural Sheet Metal Manual" for application but not less than thickness of metal being secured.

2.6 ROOF DRAINAGE SHEET METAL FABRICATIONS

- A. Hanging Gutters: Fabricate to cross section indicated, complete with end pieces, outlet tubes, and other accessories as required. Fabricate in minimum 96-inch- (2400-mm-) long sections. Furnish flat-stock gutter spacers and gutter brackets fabricated from same metal as gutters, of size recommended by SMACNA but not less than twice the gutter thickness. Fabricate expansion joints, expansion-joint covers, and gutter accessories from same metal as gutters.
 - 1. Expansion Joints: Butt type.
 - 2. Accessories: Continuous removable leaf screen with sheet metal frame and hardware cloth screen.
 - 3. Gutters with Girth up to 15 Inches (380 mm): Fabricate from the following material:
 - a. Prepainted, Metallic-Coated Steel: 24 gage thick.
 - 4. Gutters with Girth 16 to 20 Inches (410 to 510 mm): Fabricate from the following material:
 - a. Prepainted, Metallic-Coated Steel: 24 gage thick.
- B. Downspouts: Fabricate rectangular downspouts complete with mitered elbows. Furnish with metal hangers, from same material as downspouts, and anchors.
 - 1. Fabricate downspouts every 40' from the following material:
 - a. Prepainted, Metallic-Coated Steel: 24 gage thick.

2.7 LOW-SLOPE ROOF SHEET METAL FABRICATIONS

- A. Roof Edge Flashing (Gravel Stop): Fabricate in minimum 96-inch- (2400-mm-) long, but not exceeding 10-foot- (3-m-) long, sections. Furnish with 6-inch- (150-mm-) wide joint cover plates.
 - 1. Joint Style: Butt, with 6-inch- (150-mm-) wide exposed cover plates.
- B. Roof to coating Expansion-Joint Cover: Fabricate from the following material:
 - 1. Galvanized Steel: 24 gage thick.
- C. Counterflashing: Fabricate from the following material:

1. Galvanized Steel: 24 gage thick.
- D. Roof-Penetration Flashing: Fabricate from the following material:
 1. Lead: 4.0 lb/sq. ft. (1.6 mm thick), hard tempered.
 2. Galvanized Steel: 24 gage thick.
- E. Splash Pans and Pitch Pans: Fabricate from the following material:
 1. Stainless Steel: 0.0187 inch (0.5 mm) thick.
- F. Roof-Drain Flashing: Fabricate from the following material:
 1. Lead: 4.0 lb/sq. ft. (1.6 mm thick), hard tempered.

2.8 FINISHES

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions and other conditions affecting performance of work.
 1. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
 1. Torch cutting of sheet metal flashing and trim is not permitted.

- B. **Metal Protection:** Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by fabricator or manufacturers of dissimilar metals.
1. Coat side of lead sheet and prepainted flashing and trim with bituminous coating where flashing and trim will contact wood, ferrous metal, or cementitious construction.
 2. **Underlayment:** Where installing metal flashing directly on cementitious or wood substrates, install a course of Trilaminate felt underlayment.
 3. Bed flanges in thick coat of asphalt roofing cement where required for waterproof performance.
- C. Install exposed sheet metal flashing and trim without excessive oil canning, buckling, and tool marks.
- D. Install sheet metal flashing and trim true to line and levels indicated. Provide uniform, neat seams with minimum exposure of solder, welds, and elastomeric sealant.
- E. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
1. Space cleats not more than 12 inches (300 mm) apart. Anchor each cleat with two fasteners. Bend tabs over fasteners.
- F. **Expansion Provisions:** Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (600 mm) of corner or intersection. Where lapped or bayonet-type expansion provisions cannot be used or would not be sufficiently watertight, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with elastomeric sealant concealed within joints.
- G. **Fasteners:** Use fasteners of sizes that will penetrate substrate not less than 1-1/4 inches (32 mm) for nails and not less than 3/4 inch (19 mm) for wood screws.
1. Galvanized or Prepainted, Metallic-Coated Steel: Use stainless-steel fasteners.
 2. Aluminum: Use aluminum or stainless-steel fasteners.
 3. Copper Use copper or stainless-steel fasteners.
 4. Stainless Steel: Use stainless-steel fasteners.
- H. Seal joints with elastomeric sealant as required for watertight construction.
1. Where sealant-filled joints are used, embed hooked flanges of joint members not less than 1 inch (25 mm) into sealant. Form joints to completely conceal sealant. When ambient temperature at time of installation is moderate, between 40 and 70 deg F (4 and 21 deg C), set joint members for 50 percent movement either way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F (4 deg C).
 2. Prepare joints and apply sealants to comply with requirements in Division 7 Section "Joint Sealants."

- I. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pretin edges of sheets to be soldered to a width of 1-1/2 inches (38 mm) except where pretinned surface would show in finished Work.
 1. Do not solder prepainted, metallic-coated steel sheet.
 2. Do not use open-flame torches for soldering. Heat surfaces to receive solder and flow solder into joints. Fill joints completely. Completely remove flux and spatter from exposed surfaces.

3.3 ROOF DRAINAGE SYSTEM INSTALLATION

- A. General: Install sheet metal roof drainage items to produce complete roof drainage system according to SMACNA recommendations and as indicated. Coordinate installation of roof perimeter flashing with installation of roof drainage system.
- B. Hanging Gutters: Join sections with riveted and soldered joints or with lapped joints sealed with elastomeric sealant. Provide for thermal expansion. Attach gutters at eave or fascia to firmly anchored gutter brackets spaced not more than 36 inches (900 mm) apart. Provide end closures and seal watertight with sealant. Slope to downspouts.
 1. Fasten gutter spacers to front and back of gutter.
 2. Loosely lock straps to front gutter bead and anchor to roof deck.
 3. Anchor and loosely lock back edge of gutter to continuous eave or apron flashing.
 4. Anchor back of gutter that extends onto roof deck with cleats spaced not more than 24 inches (600 mm) apart.
 5. Anchor gutter with spikes and ferrules spaced not more than 24 inches (600 mm) apart.
 6. Install gutter with expansion joints at locations indicated but not exceeding 50 feet (15.24 m) apart. Install expansion joint caps.
 7. Install continuous gutter screens on gutters with noncorrosive fasteners, removable for cleaning gutters.
- C. Downspouts: Join sections with 1-1/2-inch (38-mm) telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch (25 mm) away from walls; locate fasteners at top and bottom and at approximately 60 inches (1500 mm) o.c. in between.
 1. Provide elbows at base of downspout to direct water away from building.
 2. Connect downspouts to underground drainage system indicated.
- D. Expansion-Joint Covers: Install expansion-joint covers at locations and of configuration indicated. Lap joints a minimum of 4 inches (100 mm) in direction of water flow.
- E. Splash Pans: Install where downspouts discharge on low-sloped roofs. Set in asphalt roofing cement compatible with roofing membrane.
- F. Provide and install 1' x 2' concrete splash blocks for ground-draining downspouts.

3.4 ROOF FLASHING INSTALLATION

- A. General: Install sheet metal roof flashing and trim to comply with performance requirements, sheet metal manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, set units true to line, and level as indicated. Install work with laps, joints, and seams that will be permanently watertight.
- B. Roof Edge Flashing: Anchor to resist uplift and outward forces according to recommendations for specified wind zone and as indicated.
 - 1. Interlock bottom edge of roof edge flashing with continuous cleats anchored to substrate at 16-inch (400-mm) centers.
- C. Pipe or pitch pan: Install counterflashing umbrella with close-fitting collar with top edge flared for elastomeric sealant, extending a minimum of 4 inches (100 mm) over base flashing. Install stainless-steel draw band and tighten.
- D. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing. Extend counterflashing 4 inches (100 mm) over base flashing. Lap counterflashing joints a minimum of 4 inches (100 mm) and bed with elastomeric sealant.
 - 1. Secure in a waterproof manner by means of anchor and washer at 36-inch (900-mm) centers.
- E. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Install flashing as follows:
 - 1. Turn lead flashing down inside vent piping, being careful not to block vent piping with flashing.
 - 2. Seal with elastomeric sealant and clamp flashing to pipes penetrating roof except for lead flashing on vent piping.

3.5 WALL FLASHING INSTALLATION

- A. General: Install sheet metal wall flashing to intercept and exclude penetrating moisture according to SMACNA recommendations and as indicated. Coordinate installation of wall flashing with installation of wall-opening components such as windows, doors, and louvers.

3.6 MISCELLANEOUS FLASHING INSTALLATION

- A. Equipment Support Flashing: Coordinate installation of equipment support flashing with installation of roofing and equipment. Weld or seal flashing with elastomeric sealant to equipment support member.

3.7 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.

- B. Clean and neutralize flux materials. Clean off excess solder and sealants.
- C. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed. On completion of installation, clean finished surfaces, including removing unused fasteners, metal filings, pop rivet stems, and pieces of flashing. Maintain in a clean condition during construction.
- D. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 07620

SECTION 07720 - ROOF ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:

1. Roof curbs.
2. Equipment supports.
3. Roof hatches.
4. Hatch-type heat and smoke vents.
5. Roof supports.
6. Preformed flashings.

- B. Related Sections include the following:

1. Division 6 Section "Miscellaneous Carpentry" for, wood cants, and wood nailers and pressure-treated wood walkways.
2. Division 7 low-slope roofing Sections for roofing accessories.
3. Division 7 Section "Sheet Metal Flashing and Trim" for shop- and field-fabricated metal flashing and counterflashing, roof expansion-joint covers, and miscellaneous sheet metal trim and accessories.

1.3 SUBMITTALS

- A. Product Data: For each type of roof accessory indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: Show fabrication and installation details for roof accessories. Show layouts of roof accessories including plans and elevations. Indicate dimensions, weights, loadings, required clearances, method of field assembly, and components. Include plans, elevations, sections, details, and attachments to other work.
- C. Coordination Drawings: Roof plans, drawn to scale, and coordinating penetrations and roof-mounted items. Show the following:
 1. Size and location of roof accessories specified in this Section.
 2. Method of attaching roof accessories to roof or building structure.
 3. Other roof-mounted items including mechanical and electrical equipment, ductwork, piping, and conduit.

- D. Warranty: Special warranty specified Division 7.

1.4 QUALITY ASSURANCE

- A. Sheet Metal Standard: Comply with SMACNA's "Architectural Sheet Metal Manual" details for fabrication of units, including flanges and cap flashing to coordinate with type of roofing indicated.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Pack, handle, and ship roof accessories properly labeled in heavy-duty packaging to prevent damage.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify required openings for each type of roof accessory by field measurements before fabrication and indicate measurements on Shop Drawings.

1.7 COORDINATION

- A. Coordinate layout and installation of roof accessories with roofing membrane and base flashing and interfacing and adjoining construction to provide a leak-proof, weathertight, secure, and non-corrosive installation.

1.8 WARRANTY

- A. Special Warranty on Painted Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace roof accessories that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Fluoropolymer Finish: Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
2. Finish Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers listed in other Part 2 articles.

- B. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers listed in other Part 2 articles.

2.2 METAL MATERIALS

- A. Prepainted, Metallic-Coated Steel Sheet: Steel sheet metallic coated by hot-dip process and prepainted by coil-coating process to comply with ASTM A 755/A 755M.
 - 1. Galvanized Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coated.
 - 2. Baked-Enamel Finish: AA-C12C42R1x (Chemical Finish: Cleaned with inhibited chemicals; Chemical Finish: Acid-chromate-fluoride-phosphate conversion coating; Organic Coating: As specified below). Apply baked enamel complying with paint manufacturer's written instructions for cleaning, conversion coating, and painting.
 - a. Organic Coating: Thermosetting, modified-acrylic enamel primer/topcoat system complying with AAMA 2603 except with a minimum dry film thickness of 1.5 mils (0.04 mm), medium gloss.
- B. Steel Shapes: ASTM A 36/A 36M, hot-dip galvanized to comply with ASTM A 123/A 123M, unless otherwise indicated.
- C. Galvanized Steel Pipe: ASTM A 53/A 53M.

2.3 MISCELLANEOUS MATERIALS

- A. Wood Nailers: Softwood lumber, pressure treated with waterborne preservatives for aboveground use, complying with AWWPA C2; not less than 1-1/2 inches (38 mm) thick.
- B. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil (0.4-mm) dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.
- C. Fasteners: Same metal as metals being fastened, or nonmagnetic stainless steel or other noncorrosive metal as recommended by roof accessory manufacturer. Match finish of exposed fasteners with finish of material being fastened. Provide nonremovable fastener heads to exterior exposed fasteners.
- D. Gaskets: Manufacturer's standard tubular or fingered design of neoprene, EPDM, or PVC; or flat design of foam rubber, sponge neoprene, or cork.
- E. Elastomeric Sealant: ASTM C 920, polyurethane sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
- F. Roofing Cement: ASTM D 4586, non-asbestos, fibrated asphalt cement designed for trowel application or other adhesive compatible with roofing system.

2.4 EQUIPMENT SUPPORTS

- A. Equipment Supports: Provide metal equipment supports, internally reinforced and capable of supporting superimposed live and dead loads, including equipment loads and other construction to be supported. Fabricate with welded or sealed mechanical corner joints, and then flashed as detailed in the roofing specification. Coordinate dimensions with rough-in information or Shop Drawings of equipment to be supported.
1. Material: Galvanized steel sheet, 0.079 inch (2.0 mm) thick.
 2. Metal Counterflashing: Manufacturer's standard removable counterflashing, fabricated of same metal and finish as equipment support.
 3. Fabricate units to minimum height of 12 inches (300 mm), unless otherwise indicated.

2.5 HEAT AND SMOKE VENTS

- A. Hatch-Type Heat and Smoke Vents: Manufacturer's standard double-leaf, hatch-type heat and smoke vents with integral double-wall insulated curbs and frame, with welded or sealed mechanical corner joints, integral condensation gutter, and cap flashing. Fabricate with insulated double-wall lid, continuous weathertight perimeter lid gaskets, and equip with automatic self-lifting mechanisms, UL-listed, and corrosion-resistant or hot-dip galvanized hardware including hinges, hold-open devices, and independent manual-release devices for inside and outside operation of lids.
1. Fabricate integral curbs to minimum height of 12 inches (300 mm), unless otherwise indicated.

2.6 ROOF SUPPORTS

- A. Pipe Roof Supports: Adjustable height, extruded-aluminum tube, urethane insulation filled, 2 inches (50 mm) in diameter, with aluminum base plates and manufacturer's recommended hardware for mounting to structural roof deck, and extruded-aluminum carrier assemblies, suitable for quantity of pipe runs and sizes, with EPDM end caps. Include manufacturer's standard hardware for mounting to structure or structural roof deck.
1. Pipe Support Height: As required.
 2. Pipe Roller Assembly: Stainless-steel roller assembly sized for supported pipes with extruded aluminum.
 3. Pipe Support Flashing: Uninsulated sleeve flashings with integral base flange, and EPDM grommetted top seal and base seals.
 - a. Metal: Aluminum sheet, 0.064 inch (1.6 mm) thick.
- B. Light-Duty Pipe Roof Supports: Extruded-aluminum base assembly and Type 304 stainless-steel roller assembly for pipe sizes indicated, including manufacturer's standard hardware for mounting to structure or structural roof deck.

2.7 PREFORMED FLASHINGS

- A. Exhaust Vent Flashings: Double-wall metal flashing sleeve, urethane insulation filled, with integral deck flange, 12 inches (300 mm) high, with removable metal hood and slotted metal collar, and as follows:
 - 1. Metal: Aluminum sheet, 0.064 inch (1.6 mm) thick, mill finished.
 - 2. Diameter: As indicated.
- B. Vent Stack Flashing: Metal flashing sleeve, with integral deck flange, uninsulated, and as follows:
 - 1. Metal: Aluminum sheet, 0.064 inch (1.6 mm) thick, mill finished.
 - 2. Height: 13 inches (330 mm).
 - 3. Diameter: As indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions, and other conditions affecting performance of work.
 - 1. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored and is ready to receive roof accessories.
 - 2. Verify dimensions of roof openings for roof accessories.
 - 3. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Install roof accessories according to manufacturer's written instructions. Anchor roof accessories securely in place and capable of resisting forces specified. Use fasteners, separators, sealants, and other miscellaneous items as required for completing roof accessory installation. Install roof accessories to resist exposure to weather without failing, rattling, leaking, and fastener disengagement.
- B. Install roof accessories to fit substrates and to result in watertight performance.
- C. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturer.
 - 1. Coat concealed side of stainless-steel roof accessories with bituminous coating where in contact with wood, ferrous metal, or cementitious construction.
 - 2. Underlayment: Where installing exposed-to-view components of roof accessories directly on cementitious or wood substrates, install a course of felt underlayment and cover with a slip sheet, or install a course of polyethylene underlayment.
 - 3. Bed flanges in thick coat of asphalt roofing cement where required by roof accessory manufacturers for waterproof performance.

- D. Install roof accessories level, plumb, true to line and elevation, and without warping, jogs in alignment, excessive oil canning, buckling, or tool marks.
- E. Roof Curb Installation:
 - 1. Set roof curb so top surface of roof curb is level.
- F. Equipment Support Installation:
 - 1. Set equipment support so top surface of equipment support is level.
- G. Roof Hatch Installation:
 - 1. Check roof hatch for proper operation. Adjust operating mechanism as required. Clean and lubricate joints and hardware.
 - 2. Attach safety railing system to roof hatch curb.
 - 3. Attach ladder safety post according to manufacturer's written instructions.
- H. Heat and Smoke Vent Installation: Locate, install, and test heat and smoke vents according to NFPA 204.
 - 1. Check heat and smoke vent for proper operation. Adjust operating mechanism as required.
- I. Gravity Ventilator Installation:
 - 1. Check relief vents for proper operation and unrestricted airflow.
 - 2. Install security grilles. Weld bar intersections and ends of bars to structural frame or primary curb walls.
- J. Roof Walkway Installation:
 - 1. Verify location of points of access to roof-mounted equipment via use of roof walkways.
 - 2. Remove ballast from top surface of low-slope roofing section surface at the full area of contact surface of roof walkway supports.
 - 3. Verify that roof walkway support isolation pads are in place prior to placement of roof walkway onto low-slope roofing section surface.
- K. Preformed Flashing Installation:
 - 1. Secure to roof membrane according to vent and stack flashing manufacturer's written instructions.
- L. Seal joints with elastomeric sealant as required by manufacturer of roof accessories.

3.3 TOUCH UP

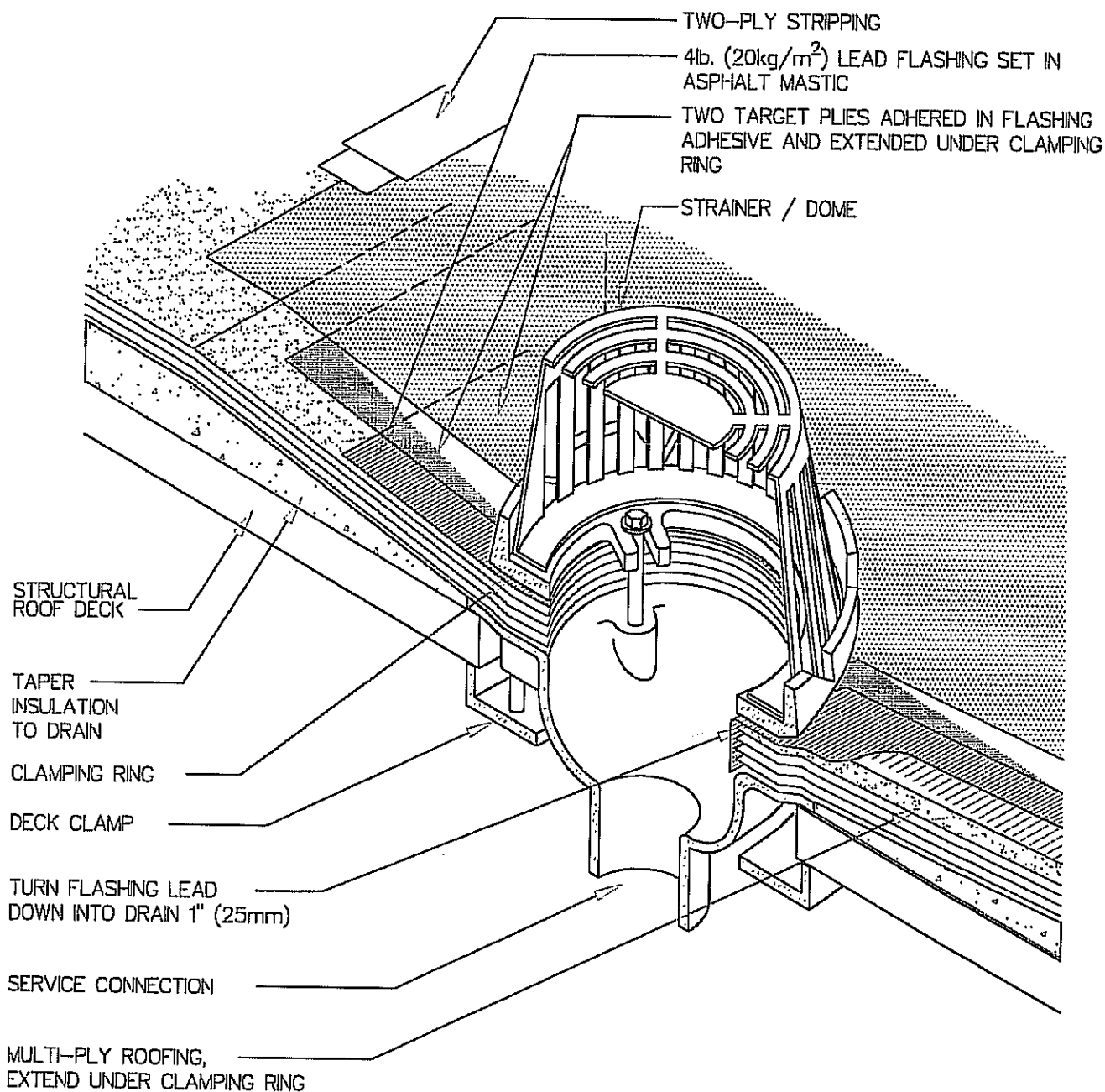
- A. Touch up factory-primed surfaces with compatible primer ready for field painting in accordance with Division 9 painting Sections.

- B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

3.4 CLEANING

- A. Clean exposed surfaces according to manufacturer's written instructions.

END OF SECTION 07720



NOTES :

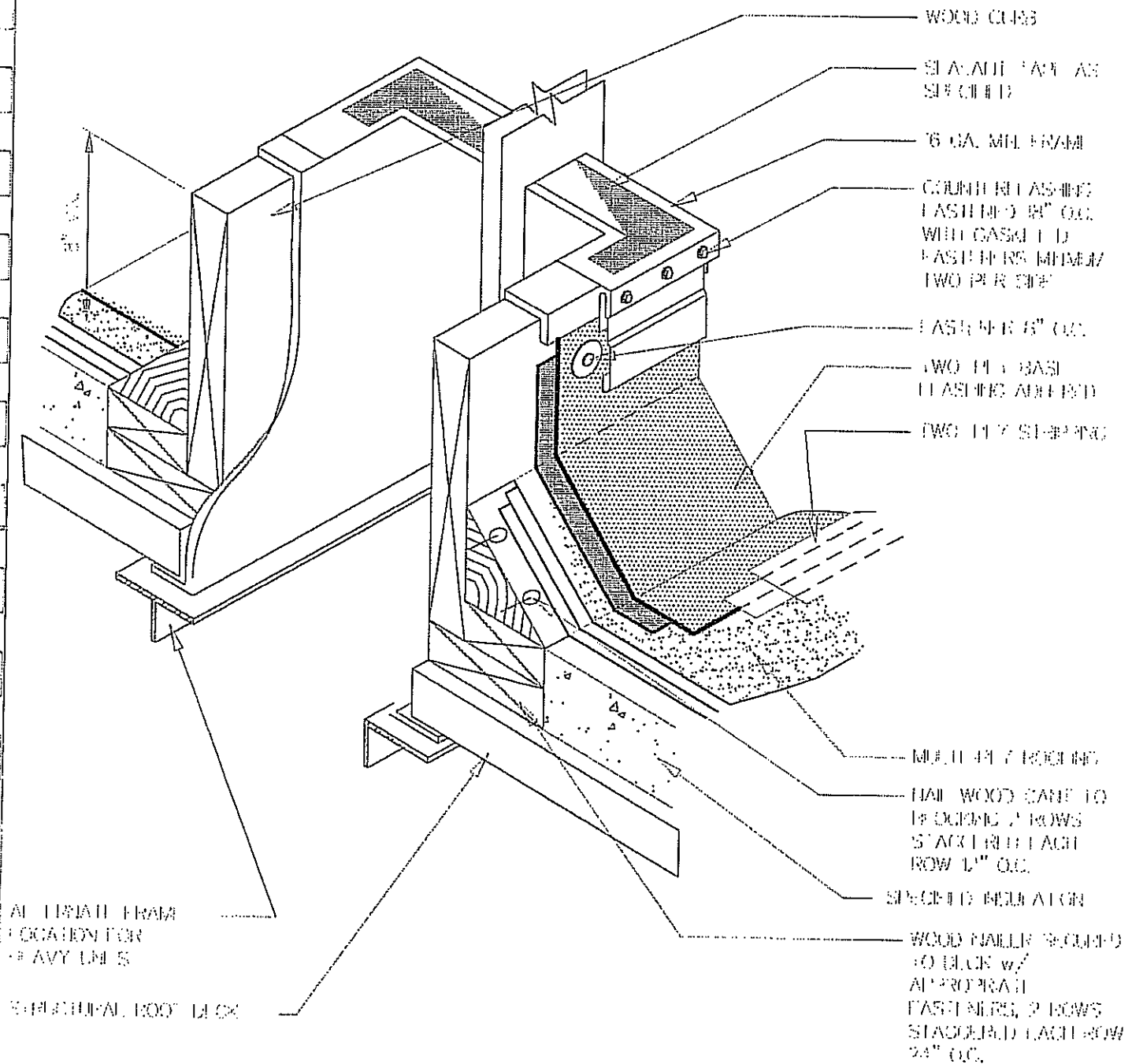
1. OPTIONAL 1"x4" (25mm x 100mm) GRAVEL STOP APPROXIMATELY 36" (914mm) SQUARE.

TREMCO®

DETAIL NAME: DRAIN ASSEMBLY DETAIL

SCALE: NTS

DRAWING No.:
C-0314



TREMCO

SHEET TITLE:

CURB FOR AIR HANDLING UNIT

SCALE: NTS

DRAWING No: C-0330

JOINT COVER 4"-6" WIDE
 OF 1/2" IN 5/8" CEILING MASTIC
 APPLIED OVER JOINT USING TWO
 FASTENERS THROUGH THE
 GAP IN THE LAMINA LAYER

FASTENERS 5" O.C.
 SPACED 1/2" FROM
 EDGE

1/2" IN
 5/8" CEILING

1/2" IN 5/8" CEILING
 1/2" IN 5/8" CEILING

TWO PLY SUPERFLEECE

METAL SLAB 5/8" CEILING
 MASTIC FORM FLANGE
 BEFORE STRIPPING

MULTI PLY ROOFING

SPECIFIED MASTIC

INSULATION

SPECIFIED INSULATION

CONTINUOUS SEAL
 FASTENED 16" O.C.

ATTACH WOOD NAIL
 TO WALL REFER TO
 FACTORY MANUAL DATA
 SHEET 1-49

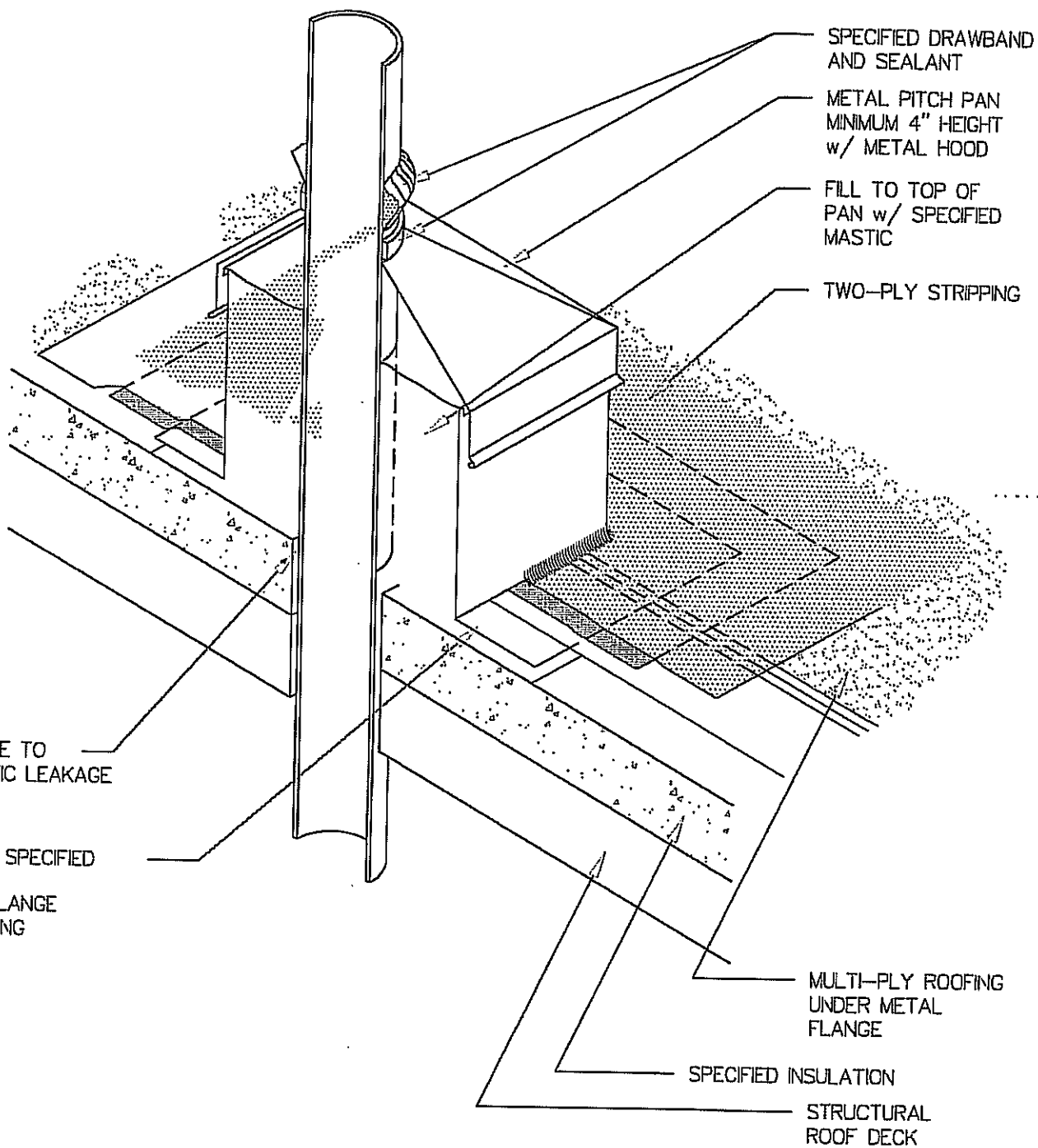
TREMCO

SHEET TITLE:

LIGHT-METAL ROOF EDGE

SCALE: NTS

DRAWING No. C-104

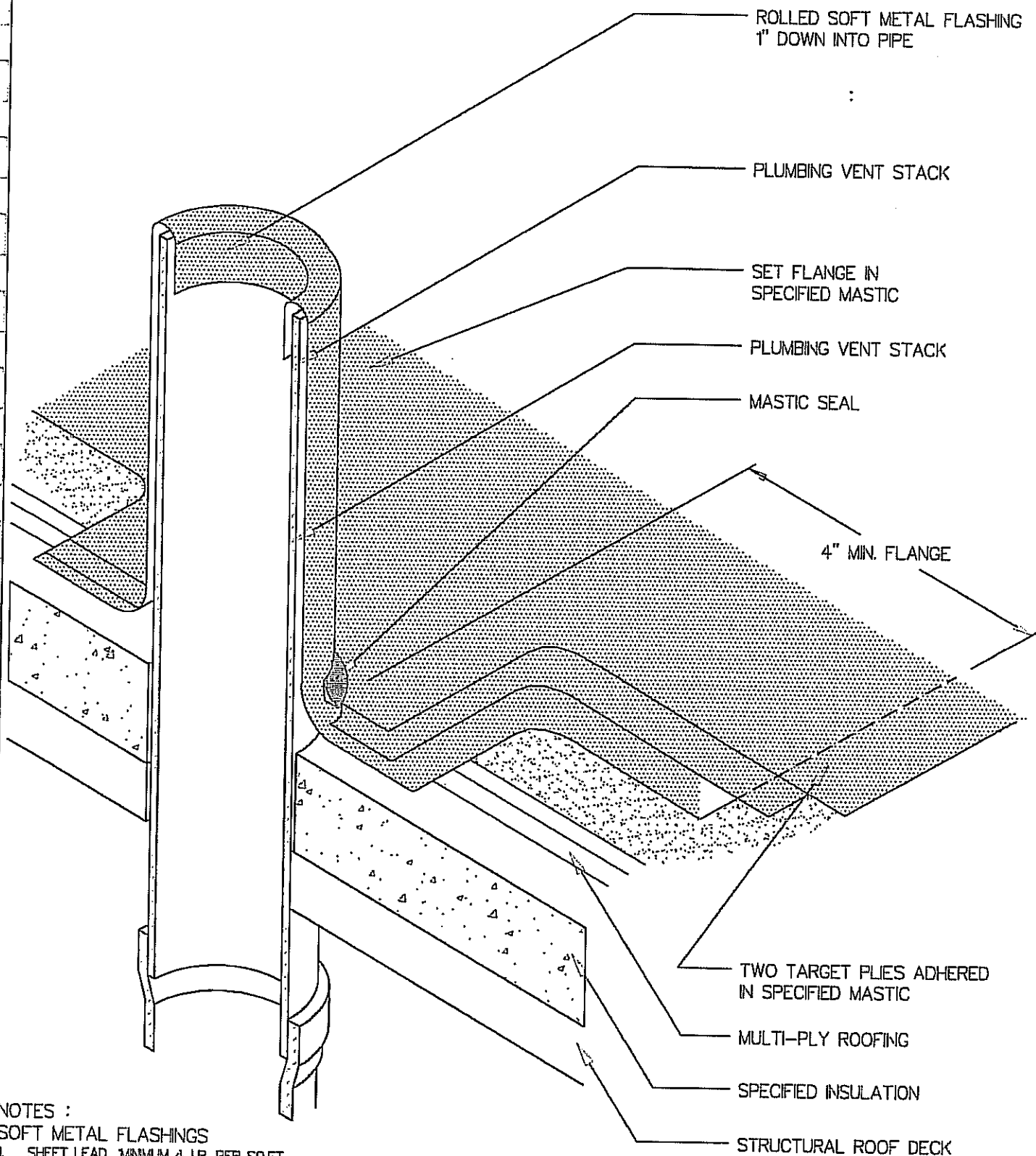


TREMCO®

DETAIL NAME: PITCH PAN

SCALE: NTS

DRAWING No:
C-0315



NOTES :

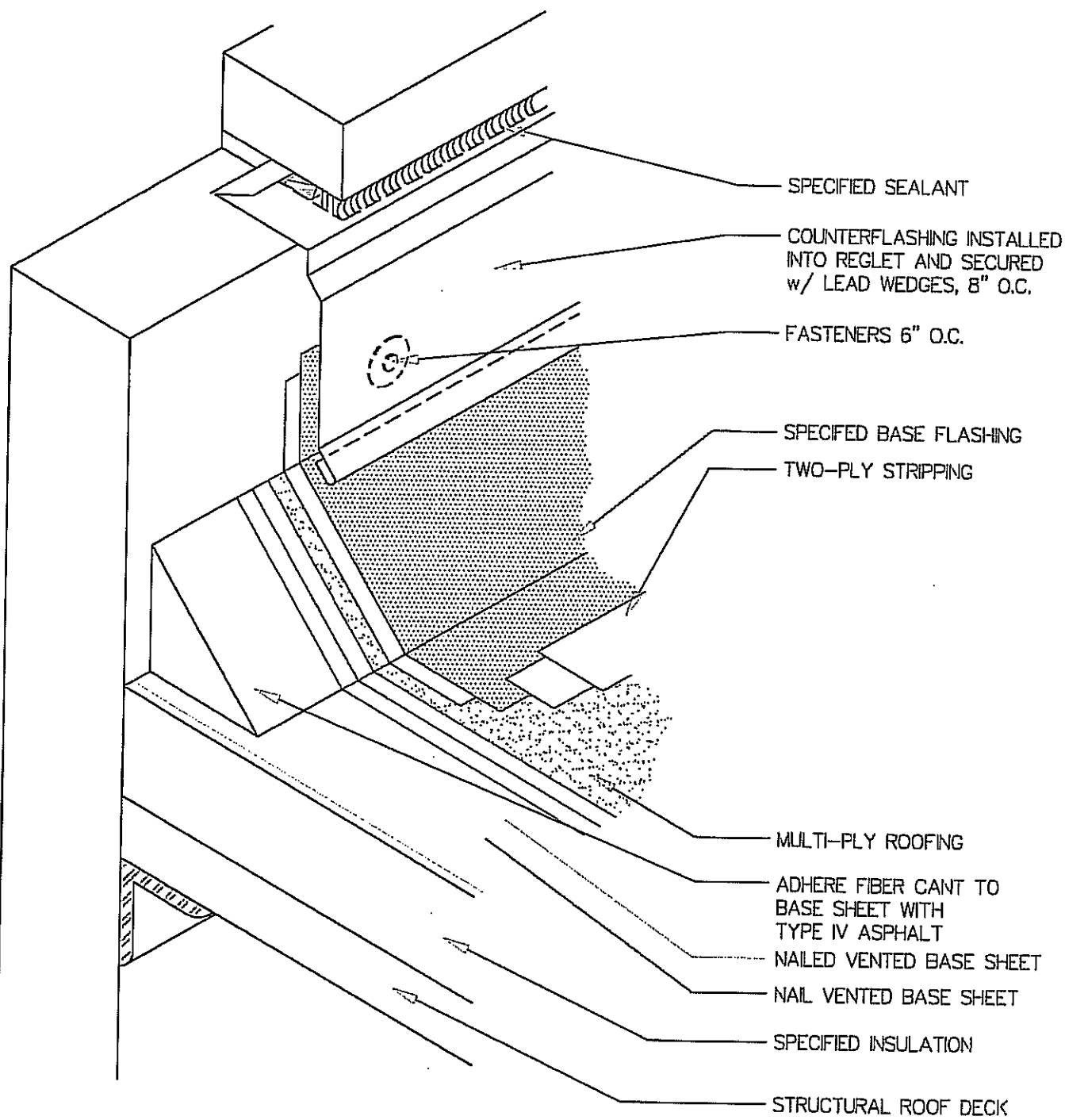
SOFT METAL FLASHINGS

1. SHEET LEAD MINIMUM 4 LB. PER SQ. FT.
2. SHEET COPPER MINIMUM 16 OZ. IF COPPER FLASHING IS INSTALLED OVER AN IRON OR STEEL PIPE, WRAP AN ASPHALT COATED ROOFING FELT TO PREVENT DIRECT CONTACT BETWEEN TWO DISSIMILAR METALS.



DETAIL NAME: PLUMBING VENT FLASHING

SCALE:	NTS
DRAWING No.:	C-0310



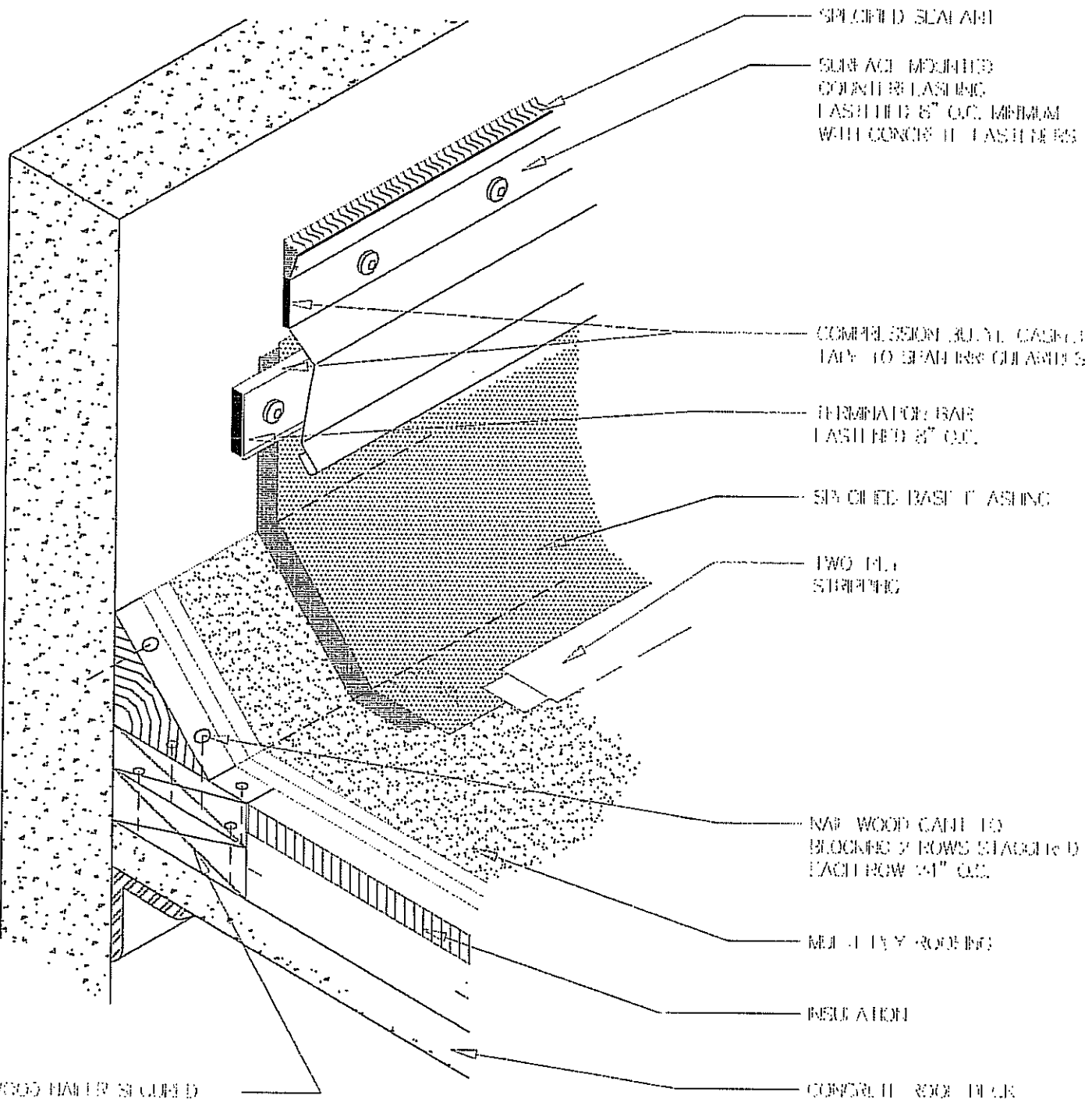
NOTES :

- 1 WHERE FOIL LAMINATED BARRIER SHEET IS SPECIFIED, MECHANICALLY ATTACH VENTED BASE SHEET OVER FOIL LAMINATED BARRIER SHEET.

TREMCO®

DETAIL NAME: BASE FLASHING W/ REGLET MOUNTED COUNTERFLASHING

SCALE:	NTS
DRAWING No.:	C-0205



WOOD HEADER SECURED
TO BLOCK WITH ANTI-RATTLE
FASTENERS, 2 ROWS STAGGERED
EACH ROW 24\"/>

TREMCO®

SHEET TITLE:

SURFACE MOUNTED COUNTERFLASHING

SCALE: NTS

DRAWING No.:

C-0207

COUNTY OF WEBB

Terms and Conditions of Invitations for Bids/Proposals

1. GENERAL CONDITIONS:

Proposers/Bidders are required to submit their proposals upon the following expressed conditions:

- (A) Proposers shall thoroughly examine the scope of work and layouts, instructions and all other contract documents.
- (B) Proposers shall make all investigations necessary to thoroughly inform themselves regarding plant and facilities for delivery of materials and equipment as required by the bid conditions. No plea of ignorance by the bidder of conditions that exist or that may hereafter exist as a result of failure to fulfill in every detail the requirements of the contract documents of the County or the compensation of the vendor.
- (C) Proposers is advised that all County contracts are subject to all legal requirements provided for in county, state and federal statutes and regulations.

2. PREPARATION OF BIDS/PROPOSALS:

Proposals will be prepared in accordance with the following:

- (A) Unit prices shall be shown and where there is an error in extension of prices, the unit price shall govern.
- (B) Alternate bids will not be considered unless specifically requested within the proposal package.
- (C) Proposed Period of Performance (POP) must be shown and shall include Sundays and holidays.
- (D) Bidders will not include Federal taxes or State of Texas limited sales excise and use taxes in bid prices since the County of Webb is exempt from payment of such taxes. An exemption certificate will be signed where applicable upon request.

3. DESCRIPTION OF SUPPLIES:

Any catalog or manufacturer's reference used in describing an item is merely descriptive, and not restrictive, unless otherwise noted, and is used only to

indicate type and quality of material. Bidders are required to state exactly what they intend to furnish otherwise they shall be required to furnish the items as specified.

4. SUBMISSION OF BIDS/PROPOSALS:

- (A) Bids/Proposals and changes thereto shall be enclosed in sealed envelopes addressed to the Webb County Clerk. The name and address of the bidder, the date of the proposal opening and the material or service bid on shall be placed on the outside of the envelope.
- (B) Bids/Proposals must be submitted in the forms furnished. Electronic bids/proposals will not be considered. Bids/Proposals, however, may be modified by written notice provided such notice is received at the County Clerk's Office before the time and date set for the proposal opening.
- (C) Samples, when required, must be submitted within the time specified, at no expense to the County of Webb. If not destroyed or used up during testing, samples will be returned upon request at the proposer expense.

5. REJECTION OF BIDS/PROPOSALS:

- (A) The Purchasing Agent may reject a bid/proposal if it is deemed to be non responsive and/or provided by not responsible bidder/proposer.
- (B) No bid/ proposal submitted herein shall be considered if the proposer owes any delinquent taxes to the County of Webb at the time proposals are opened. In the event that the successful proposer herein subsequently becomes delinquent in the payment of his or its County taxes, such fact shall constitute grounds for cancellation of the contract.
- (C) No bid/proposal submitted herein shall be considered unless the bidder/proposer warrants that upon execution of a contract with the County of Webb, the bidder/ proposer will not engage in employment practices which have the effect of discriminating against employees or prospective employees because of race, color, sex, creed, disability, or national origin and will submit such report as the County may thereafter require to assure compliance.
- (D) The County may, however, reject all proposals whenever it is deemed in the best interest of the County to do so, and may reject any part of a bid. County may also waive any minor informalities or irregularities in any bid.

6. WITHDRAWAL OF BIDS/PROPOSALS:

Bids/Proposals may not be withdraw after the closing time and date.

7. LATE BIDS/PROPOSALS OR MODIFICATIONS:

Bids/Proposals and modifications received after the time set for the proposal submission will not be considered.

8. CLARIFICATIN OR OBJECTION TO PROPOSAL SPECIFICATIONS:

If any person contemplating submitting a proposal for this contract is in doubt as to the true meaning of the specifications, or other bid/proposal documents or any part thereof, the bidder/proposer may submit to the Purchasing Agent on or before five days prior to scheduled opening a request for clarification. All such requests for information shall be made in writing and the person submitting the request will be responsible for its prompt delivery. Any interpretation of Webb County proposal package specification instructions, if made, will be made only by Addendum duly issued. A copy of such Addendum will be posted on the web-site and email to the vendors list that have received email copy of package. The County will not be responsible for any other explanation or interpretation made or given prior to the award of the contract. Any objections to the specifications and requirements as set forth in this proposal must be filed in writing with the Purchasing Agent on or before five days prior to the scheduled opening.

Where there is a question that will not lead to an addendum, the questions will be made in writing to the Purchasing Department. The answer will be in writing posted on the website for everyone to receive the same response.

9. DELINQUENT TAXES:

All vendors seeking to do business with Webb County must owe no delinquent taxes to the County. Attestation of owing no delinquent taxes will be required. If a vendor owes taxes to Webb County, those taxes should be paid before submitting a proposal.

10. AWARD OF CONTRACT:

- (A) The contract will be awarded to the best qualified according to the bid/proposal criteria and a written award letter will be issue.
 - (1) Award of a bid/proposal requires formal approval by the Commissioners Court.
 - (2) Bid/Proposal contract must also be approved by the Commissioners Court.
 - (3) The written notice to proceed will be for construction contracts provided after all contract documents are signed.

- (D) Prices must be quoted F.O.B. Webb County with all transportation charges prepaid, unless otherwise specified in the Invitation for Bids/Proposals.
- (E) Delivery time will be considered in breaking of tie proposals.
- (F) Period of Performance will commence with written Notice to Proceed.

11. BID BOND

A bid bond in the amount of 5% of the Bid/Proposal issued by an acceptable surety company shall be submitted with each bid. A certified check or Bank Draft payable to the Webb County may be submitted in lieu of the Bid Bond. All such bonds, cashier checks shall be drawn payable to Webb County.

12. PERFORMANCE AND PAYMENT BOND

A Performance Bond is require for **construction work** if the contract is in excess of \$100,000; and a Payment Bond is require if the **construction contract** is in excess of \$25,000. The requirement is for all prime contractors which enter into a formal contract with the State, any department, board, agency, municipality, county, school district or any division or subdivision. The failure of the successful bidder/proposer to execute the agreement and supply the required bonds within ten (10) days **after** the award or within such extended period as Webb County may grant, shall constitute a default and Webb County may, at its option either award the contract to next lowest responsible bidder, or re-advertise for bids/proposals. In either case, Webb County may charge against the bidder the difference between the amount of the bid, and the amount for which a contract is subsequently executed irrespective of whether this difference exceeds the amount of the bid bond. If a more favorable bid is received through re-advertisement, the defaulting bidder shall have no claim against Webb County for a refund.

13. WORKERS' COMPENSATION INSURANCE COVERAGE:

The Workers' Compensation Commission has adopted Rule 110.110 effective with all bids advertised after September 1, 1994. The TWCC has stated that it is aware that a statutory requirement for workers' compensation insurance coverage is not being met. Therefore, Rule 110.110 requires that all bidders be covered under workers' compensation insurance to achieve compliance from both contractor(s) and governmental entities. **Attachment A** is provided in accordance with the requirements on governmental entities. Please read carefully and prepare your bid in full compliance to TWCC Rule 110.110. Failure to provide the required certificates upon submission of a bid could result in your bid being declared non-responsive.

14. REFERENCES:

Webb County requires proposer to supply with this proposal, a list of at least three (3) references where like services have been supplied by their firm. Include name of firm, address, telephone number and name of representative.

15. STATEMENTS:

No oral statement of any person shall modify or otherwise change, or affect the terms conditions, plans and/or specifications stated in the bid/proposal packages.

16. ETHICS:

The proposer shall not accept or offer gifts or anything of value nor enter into any business arrangement with any employee, of the Webb County Purchasing Department.

17. PROPRIETARY INFORMATION:

All materials submitted to the County become public property and are subject to the Texas Open Records Act upon receipt. If a proposer does not desire proprietary information in the proposal to be disclosed, each page must be identified and marked proprietary a time of submittal. The County will, to the extent allowed by law, endeavor to protect such information from disclosure. The final decision as to what information must be disclosed, however, lies with the Texas Attorney General. Failure to identify proprietary information will result in all unmarked sections being deemed non-proprietary and available upon public request.

Webb County

Conflict of Interest Disclosure

Effective January 1, 2006, Chapter 176 of the Texas Local Government Code requires that any vendor or person considering doing business with a local government entity disclose in the Questionnaire Form CIQ, the vendor or person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filed with the records administrator of Webb County no later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code. A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. The questionnaire may be viewed and printed by following the link before:

By submitting a response to this request, the vendor represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code.

The Webb County Officials who come within Chapter 176 of the Local Government Code relating to filing of Conflict of Interest Questionnaire (Form CIQ) include:

1. Webb County Judge Danny Valdez
2. Commissioner Linda Ramirez
3. Commissioner Rosaura "Wawi" Tijerina
4. Commissioner John Galo
5. Commissioner Jaime Canales
6. Judge Joe Lopez, Chairman, 49th Judicial District
7. Judge Becky Palomo, 341st Judicial District
8. Judge Monica Notzon, 111th Judicial District

Please send completed forms to the Webb County Clerk's Office located at 1110 Victoria, Suite 201, Laredo, Texas 78040.

CONFLICT OF INTEREST QUESTIONNAIRE**FORM CIQ****For vendor or other person doing business with local governmental entity**

This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of person who has a business relationship with local governmental entity.

2 ☐ Check this box if you are filing an update to a previously filed questionnaire.

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

3 Name of local government officer with whom filer has employment or business relationship.

Name of Officer

This section (Item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?

☐ Yes☐ No

B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐ Yes☐ No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?

☐ Yes☐ No

D. Describe each employment or business relationship with the local government officer named in this section.

4

Signature of person doing business with the governmental entity

Date

Adopted 06/29/2007

CERTIFICATION
REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY
EXCLUSION FOR COVERED CONTRACTS

PART A.

Federal Executive Orders 12549 and 12689 require the Texas Department of Agriculture (TDA) to screen each covered potential contractor to determine whether each has a right to obtain a contract in accordance with federal regulations on debarment, suspension, ineligibility, and voluntary exclusion. Each covered contractor must also screen each of its covered subcontractors.

In this certification "contractor" refers to both contractor and subcontractor; "contract" refers to both contract and subcontract.

By signing and submitting this certification the potential contractor accepts the following terms:

1. The certification herein below is a material representation of fact upon which reliance was placed when this contract was entered into. If it is later determined that the potential contractor knowingly rendered an erroneous certification, in addition to other remedies available to the federal government, the Department of Health and Human Services, United States Department of Agriculture or other federal department or agency, or the TDA may pursue available remedies, including suspension and/or debarment.
2. The potential contractor will provide immediate written notice to the person to which this certification is submitted if at any time the potential contractor learns that the certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
3. The words "covered contract", "debarred", "suspended", "ineligible", "participant", "person", "principal", "proposal", and "voluntarily excluded", as used in this certification have meanings based upon materials in the Definitions and Coverage sections of federal rules implementing Executive Order 12549. Usage is as defined in the attachment.
4. The potential contractor agrees by submitting this certification that, should the proposed covered contract be entered into, it will not knowingly enter into any subcontract with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the Department of Health and Human Services, United States Department of Agriculture or other federal department or agency, and/or the TDA, as applicable.

Do you have or do you anticipate having subcontractors under this proposed contract?

☐ Yes

☐ No

5. The potential contractor further agrees by submitting this certification that it will include this certification titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion for Covered Contracts" without modification, in all covered subcontracts and in solicitations for all covered subcontracts.
6. A contractor may rely upon a certification of a potential subcontractor that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered contract, unless it knows that the certification is erroneous. A contractor must, at a minimum, obtain certifications from its covered subcontractors upon each subcontract's initiation and upon each renewal.
7. Nothing contained in all the foregoing will be construed to require establishment of a system of records in order to render in good faith the certification required by this certification document. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
8. Except for contracts authorized under paragraph 4 of these terms, if a contractor in a covered contract knowingly enters into a covered subcontract with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the federal government, Department of Health and Human Services, United States Department of Agriculture, or other federal department or agency, as applicable, and/or the TDA may pursue available remedies, including suspension and/or debarment.

PART B. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION FOR COVERED CONTRACTS

Indicate in the appropriate box which statement applies to the covered potential contractor:

- ☐ The potential contractor certifies, by submission of this certification, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this contract by any federal department or agency or by the State of Texas.
- ☐ The potential contractor is unable to certify to one or more of the terms in this certification. In this instance, the potential contractor must attach an explanation for each of the above terms to which he is unable to make certification. Attach the explanation(s) to this certification.

Name of Contractor	Vendor ID No. or Social Security No.	Program No.
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Signature of Authorized Representative

Date

Printed/Typed Name and Title of
Authorized Representative

CERTIFICATION REGARDING FEDERAL LOBBYING
(Certification for Contracts, Grants, Loans, and Cooperative Agreements)

PART A. PREAMBLE

Federal legislation, Section 319 of Public Law 101-121 generally prohibits entities from using federally appropriated funds to lobby the executive or legislative branches of the federal government. Section 319 specifically requires disclosure of certain lobbying activities. A federal government-wide rule, "New Restrictions on Lobbying", published in the Federal Register, February 26, 1990, requires certification and disclosure in specific instances.

PART B. CERTIFICATION

This certification applies only to the instant federal action for which the certification is being obtained and is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$100,000 for each such failure.

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
2. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with these federally funded contract, subcontract, subgrant, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions. (If needed, contact the Texas Department of Agriculture to obtain a copy of Standard Form-LLL.)

3. The undersigned shall require that the language of this certification be included in the award documents for all covered subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all covered subrecipients will certify and disclose accordingly.

Do you have or do you anticipate having covered subawards under this transaction?

☐ Yes

☐ No

Name of Contractor/Potential Contractor	Vendor ID No. or Social Security No.	Program No.

Name of Authorized Representative	Title

Signature – Authorized Representative

Date

PROOF OF NO DELINQUENT TAXES OWED TO WEBB COUNTY

Name _____ owes no delinquent property taxes to Webb County.

_____ owes no property taxes as a business in Webb County.
(Business Name)

_____ owes no property taxes as a resident of Webb County.
(Business Owner)

Person who can attest to the above information

*** SIGNED NOTORIZED DOCUMENT AND PROOF OF NO DELINQUENT TAXES TO WEBB COUNTY.**

The State of Texas

County of Webb

Before me, a Notary Public, on this day personally appeared _____, know to me (or proved to me on the oath of _____ to be the person whose name is subscribed to the forgoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this ____ day of _____ 2014.

Notary Public, State of Texas

My commission expires the ____ day of _____ 20__.

(Print name of Notary Public here)

Properser Information

Name of Proposer: _____

Address: _____

Phone: _____

Email Address: _____

Signature of Person Authorized to Sign Proposer:

Signature

Print Name

Title

Indicate status as to "Partnership", "Corporation", "Land Owner", etc.

(Date)

Note:

All submissions relative to these Proposals shall become the property of Webb County and are nonreturnable.

If any further information is required please call the Webb County Purchasing Agent, Dr. Cecilia May Moreno, at (956)523-4125 or Administrative Assistant, Leticia Gutierrez, at (956)-523-4127.

References

Name of Firm	Address	Phone	Name of Contact